

CITY UTILITIES

Bringing Power Home.

August 29, 2008

Memo to: Mayor and Members of City Council
Chairman and Members of the Board of Public Utilities

JOINT BOARD/CITY COUNCIL BUDGET STUDY SESSION

Thank you so much for the opportunity to present the 2009 City Utilities budget and revised natural gas rate proposal for your consideration. We hope the information that follows is responsive to the questions raised last week at the Budget Study Session. As we mentioned, we certainly want to respond to any questions you may have and urge you to let us know if there is additional information you would find useful.

- **What were natural gas fuel costs 10 years ago?**

Natural Gas for Generation	\$ 7,693,439
Natural Gas Purchased for Resale	\$ 31,819,659

FY 2009 Projections

Natural Gas for Generation	\$ 12,780,017
Natural Gas Purchased for Resale	\$120,516,799

- **How do natural gas costs for CU customers compare to the cost of living in our area?**

Based on data from 2006, the most recent available information, City Utilities compares favorably. In Greene County, per capita income is 15.3% below national per capita income, but 19.7% below natural gas costs nationally.

City Utilities also compares favorably to Missouri figures, with per capita income at 5.1% below the state average, while natural gas costs were 22.5% below the state average.

- **What is the average age of the natural gas distribution mains?**

The average age of natural gas pipe in the distribution system is 26.25 years.

- **How have material costs for the natural gas system changed over the past five years?**

<u>Steel Pipe</u>	Prices have increased between 661% and 785%, depending on size, since 2003.
<u>Iron Fittings</u>	Prices have increased between 40% and 140%, depending on type and size, since 2003.
<u>Plastic Pipe</u>	Prices have increased between 11% and 26%, depending on size, since 2003.
<u>Gas Meters</u>	Prices have increased by 13% since 2003.

We continue to work diligently to reduce the impact these cost increases have on our customers. We have implemented innovative purchasing strategies and blanket purchase agreements and, where possible, changed the types of materials we use to minimize the cost of projects. In the case of the eastern gas loop, the project has increased by \$130,000 due to the escalation in cost of steel pipe.

- **What are the projections for costs of various fuels and delivery costs, in the next ten years, and for the prospect of electric and hybrid vehicles?**

<u>Natural Gas</u>	2018 natural gas pricing is estimated at \$7.15/thousand cubic feet (approximately one DTH). <ul style="list-style-type: none">• Includes allowance for storage and transmission costs.
<u>Coal</u>	2018 coal pricing is estimated at \$58/ton delivered for Powder River Basin fuel. <ul style="list-style-type: none">• Includes delivery, and assumes that City Utilities will remain captive to one railroad service.
<u>Electric Vehicles</u>	2018 penetration of electric vehicles in the transportation fleet is estimated at 25%-30%. Plug-in Hybrid Electric Vehicles (PHEV) are considered the most viable technology at this time. Based on this technology and 30% vehicle penetration, the following estimates are provided. <ul style="list-style-type: none">• If recharge at home only (no additional recharge infrastructure constructed), and uncontrolled timing of recharge,<ul style="list-style-type: none">– Impact on total load increases about 2.7%.– Impact on peak demand increases about 2.5%.• If recharge is delayed, or controlled within range of off-peak generation hours,<ul style="list-style-type: none">– Impact on total load increases about 2.7%.– Impact on peak demand would be negligible.

- If continuous recharge is available (charging station infrastructure is widely constructed and available) in an uncontrolled on-demand fashion,
 - Impact on total load increases about 4.8%.
 - Impact on peak demand increases about 4.6%.

This information is derived from the Energy Information Administration, CU data and judgments, Xcel Energy and the Oak Ridge National Laboratory.

• **How have the energy management and conservation programs performed to date?**

As part of a more aggressive energy management and conservation effort made by City Utilities, 14 new rebate and incentive programs have been implemented since October 1, 2006. These programs, as well as other new initiatives, add to the existing portfolio of programs and efforts. City Utilities has based the implementation of these programs on recommendations made by the Frontier Associates report and the objectives for portfolio development.

- ENERGY STAR® Programmable Thermostat Rebate
- Residential Insulation Rebate
- Commercial Lighting Rebate
- Building Operator Certification Program
- Rain Sensor Rebate
- Efficient Toilet Rebate
- ENERGY STAR® Central Air Conditioner Rebate
- ENERGY STAR® Natural Gas Furnace Rebate
- ENERGY STAR® Air-Source Heat Pump Rebate
- ENERGY STAR® Geothermal Heat Pump Rebate
- Preseason HVAC Tune-Up
- ENERGY STAR® Home Rating Service
- EnergyWise Grant Program
- Green Building Program

Existing & Additional Programs:

- Compact Fluorescent Light Rebate
- HomeSense Residential Energy Audits
- Commercial and Industrial Energy Audits
- Commercial Lighting Audits
- Online Energy Audits, Resources and Tools
- JRBP Rain Barrel Rebate
- LED Traffic Signal Light Upgrade
- TechHOUSE Renewable Energy Project
- Noble Hill Landfill Renewable Energy Center

August 29, 2008

Page 4

As outlined in the Frontier Associates report, program implementation is a process that takes time, and customer awareness increases over time. This is evident in participation from the first program year compared to the second program year, which is not yet complete:

Rebates Issued in Fiscal Year 2007	= 863
Rebates Issued in Fiscal Year 2008 (through August 15, 2008)	= 4,429

The kWh savings associated with these programs would provide the annual energy consumption of 5,563 homes.

Savings will continue to increase as participation increases and additional programs are implemented. City Utilities will continue to fund these programs at the level of \$1 million annually, and we hope to use approximately \$240,000 in savings from another part of the utility for development of programs in fiscal year 2009. One of those being considered is a program designed to install additional attic insulation in the homes of low-income customers.

Again, thank you for allowing us to present this information to you. We look forward to continuing our discussion about these important issues prior to final consideration of the 2009 Annual Operating Budget and the natural gas rate proposal.

Sincerely,



John Twitty
General Manager

c: CU Citizens' Advisory Council
CU Executive Committee
Ray Ross
Cara Shaefer